Application Serial No. 10/607,276 Amendment dated November 2, 2004 Reply to Office action of August 17, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A micro channel unit comprising:

a micro channel with a width of micrometer dimensions through which liquid flows, the micro channel comprising:

a plurality of straight channel portions extending in a straight line pattern; and

<u>at least one</u> connecting channel portions that connects each pair of adjacent straight

channel portions, the connecting channel portions being wider than the straight channel portions

connected by the connecting channel portions;

wherein the connecting channel is adapted to change flowing direction of the liquid in an angle in the range of 90 degrees to 180 degrees.

- 2. (Original) The micro channel unit of claim 1, wherein each connecting channel portion becomes progressively wider from one of two adjacent straight channel portions connected by the connecting channel portion, toward the other straight channel portion, and is widest in a middle portion.
- 3. (Original) The micro channel unit of claim 2, wherein the shape of the connecting channel portion is curved.